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ABSTRACT

The course described here offers computer-based instruction (CBI) in the history of the Russian literary language. It is designed to follow an introductory CPI Slavic course. The object of the course is to introduce graduate students in Russian literature to the types of changes that language in general, and Russian literary language in particular, undergoes in time and to discuss how these changes vary over a large territory. The most important single limitation of the CBI system is the speed of presentation of the materials to the student, which prohibits the asking of questions. In addition, the course material itself presents certain limitations in that there are historical gaps in information availability, making programming difficult. The CBI portions of this course were offered for the first time to a class of five students during the spring quarter of 1973. On the final examination students were tested on: (1) subjects that had been lectured on and reinforced by supplementary reading; (2) subjects that had been lectured on and reinforced by CBI material; (3) subjects about which they had only read; and (4) CBI material not reinforced by lectures. The results demonstrated that the material presented in the CBI/lecture combination was absorbed the best, and generally the performance of the students was better than in the previous class, which had depended on lectures and reading alone. As a final assessment, it is concluded that the CBI material is pedagogically sound. Sample portions of the programmed lessons and tests are provided. (Author/LG)

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TOWARD A COMPUTER-BASED COURSE IN THE HISTORY OF THE RUSSIAN LITERARY LANGUAGE

by

Richard Schupbach

TECHNICAL REPORT NO. 221

December 31, 1973

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TOWARD A COMPUTER-BASED COURSE IN THE HISTORY OF THE RUSSIAN LITERARY LANGUAGE[1]

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Slavic 212, The History of the Russian Literary Language, is designed as a sequel to Professor Joseph A. Van Campen's computer-based Slavic 211, Introduction to Old Church Slavonic and Early Russian Texts. Computer-based instruction (CBI) portions of Slavic 212 were offered for the first time during the spring quarter of 1973.

1. The Students

Four of the five students enrolled in Slavic 212 had completed Slavic 211 during the previous quarter and were thus familiar with CBI. The fifth had studied Old Church Slavonic (OCS) at another institution and had to familiarize herself with the system during the early part of the course. All five students were primarily interested in Russian literature; as expected, they were somewhat disoriented at first because the subject matter of Slavic 212 has to do more with linguistics than literature, per se. However, as the students progressed, this became less of a problem.

2. Technical Aspects of CBI

This material is covered in considerable detail in Van Campen (1973, pp. 2-8).

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3. The Course

The nature of the CBI system employed and the subject matter of Slavic 212 place certain limitations on what can and what cannot be programmed. Moreover, this year was the instructor's first experience with CBI and thus, somewhat modest goals were set at the outset. For these reasons, CBI was, and, for the present at least, must remain coupled with lectures for the teaching of the history of Russian. However, as I will show below, the role of the instructor as lecturer will be relatively minor in winter quarter 1974, when the revised course is offered.

The object of Slavic 212 is to introduce graduate students in Russian literature to the types of changes that language in general, and the Russian literary language in particular, undergoes in time, and to discuss how these changes vary over a large territory. In order to demonstrate this, I deal with the following subject matter:

1. General theoretical material on the effect of the passage of time on language;

2. Old Russian (OR), by which term is meant spoken and written Russian of the tenth and eleventh centuries;

3. The changes undergone by OR as a result of internal, evolutionary processes;

4. The nature of the interaction of OR and OCS in the formation of the Russian literary language;

5. Analysis of representative texts from various periods up to and including the seventeenth century.

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Certain of the areas to be covered are readily amenable to programming for CBI. For example, since the teaching program itself was designed for language instruction, it was most efficient in teaching OR. Moreover, since OCS and OR represent no more than dialects of the same language, I was able to draw on the material in Slavic 211 as a basis for instruction in the morphology of OR. Five such lessons, on the noun, pronoun, adjective, numeral, and verb, were drawn up (see Appendix I). In addition to this material there is an introductory lesson on the differences between the OCS and OR orthographies. The design of these lessons is straightforward and the system is employed, albeit without audio, largely in the manner for which it was designed.

In addition to these lessons, two were composed that concern historical differences between the OR and OCS phonologies and syllable structure. Last, three lessons were drawn up that deal with evolutionary change in OR and Medieval Russian. These five were used to test the efficacy of a language-teaching system for the teaching of language history (see Appendix II).

4. Limitations Intrinsic to the System

One of the major differences between language and historical material is that the former permits the use of short description and query that, in turn, elicit short and completely predictable answers, whereas in teaching history more extensive lecturing is required, and the answers to the questions, far from a single predictable word, or perhaps two, become quite complicated and can be expressed in a variety of ways. With respect to description or lecturing, the most important, single

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limitation imposed by the system is the speed of the Model 35 teletype, i.e., the speed of presentation of the material to the student.

At 10 characters per second, expansive lecturing must be kept to an absolute minimum. As a rule of thunb it was decided that, in order to maintain the students' attention, no more than six 70-character lines (less than 90 words) should be presented to the student without involving him directly in the instruction, i.e., without asking him a question. Note that these few words must contain the question asked as well as the lecture material. Within these limits it was found that a substantial portion of material on selected topics having to do with evolutionary change in OR could be successfully programmed. However, material on the complexities of interaction of OCS with OR and general material on the nature of language change could not be programmed due to the speed of the teletypes.

The problem of the students' answers is annoying, but not crucial. The teaching program cannot analyze an answer; it can only match it against the string of characters that the instructor has programmed as being 'correct'. If, for instance, the answer to a question happens to be "14th century" and the student writes "XIVth century" or "14th cent.", etc., the response is treated as wrong. Thus, since all answers must be predetermined, heavy reliance on multiple-choice and true-false responses is required.

5. Limitations Intrinsic to the Material

The limitations imposed by the material itself, particularly given the bounds of the system, are in many cases considerable. First, the

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historical record of the language is not complete; not everything of interest or importance was recorded or otherwise preserved. Thus there are factual gaps in many arguments, and, most regrettably, similar gaps are occasionally found in the logic of some historical linguists. In a normal classroom situation these factors create only minor problems; however, in developing material for CBI they can take on crucial importance.

In teaching a language using CBI a basic, deductive logic can be employed that is quite simple, for example:

> In grammatical situation X, forms of set Y behave in a certain Z manner.
>
> Form A belongs to set Y.
>
> Therefore, in situation X, form A behaves in a Z manner.

Such an argument is convincing, and as we pointed out above, questions based on it elicit short, predictable answers, e.g.,

> Q: In what manner does A behave in situation X?
>
> A: Z.

However, when discussing language change, given that a complete argument can be found and that the logic employed in describing the change is unflawed, we find that that change normally occurs in such a way that a given language item will come under a variety of influences in a given period. Which, if any, of these influences will have a lasting effect on the form is often difficult, if at all possible, to predict a priori. Thus, if we are discussing a given process and wish to follow its activity over a large number of forms and a considerable expanse of

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time, the number of examples that will show the process in its 'pure' form will tend to be small. Yet this purity of logic and presentation is essential since the student cannot stop the computer and ask a question. The logic and progression of the explanation must not be merely sound; it must be inescapable. Note further that while the present subject matter is linguistic in nature, our students' demesne is literature. Thus forced out of familiar surroundings, they require especially clear exposition while they familiarize themselves with linguistic processes and terminology.

Once a logical and sequential thread of an argument is found, lesser competing processes can be described as corollaries to it. However, the time and effort that go into winnowing large amounts of historical information is considerable (see Appendix III).

The effect of all these limitations, those intrinsic to the system as well as to the material, was to put considerable demands upon the time of the instructor and Professor Van Campen, without whose generous help the material could not have been prepared; furthermore, there were certain elements of the course that simply could not be programmed. Nonetheless, this summer I expect to program the remaining changes that occurred in the OR period (tenth through fifteenth centuries). This represents the greatest share of changes during the written history of the language. Fifteenth-century Russian is surprisingly 'modern' in form, at least in comparison with tenth-century OR.

In addition to this new material, I am organizing a convenient means of presenting texts for analysis on the teletype. With this new material a full two-thirds of Slavic 212 will be computer based. The only remaining

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material to be covered independently in the lectures will be the intricacies of the interaction of OCS and OR and general material on the nature of language change in time and space. The demands put upon the instructor's time with this arrangement will be minor.

The implementation of the above assumes no changes in the present system. Given a faster teaching apparatus, most, if not all, of the remaining material could be programmed. But this may not be necessary. The use of comparatively slow hardware, while limiting the programming of certain material, requires a clarity and brevity of exposition and a degree of involvement of the student that is not likely to be achieved where its existence is not made imperative by circumstances. Moreover, even if the entire course could be programmed, a certain amount of the instructor's participation would be required for fielding questions and providing moral support for the students.

6. Student Reaction

The students' reaction to the programmed material and to the course as a whole has been favorable (see Appendix IV). There were some preliminary complaints, but by the third week of the quarter, perhaps not coincidentally after the rains stopped, the students became much more at ease with the lessons and the system and the material. After they finished the CBI section of the course, one 2-hour class section was given over to comments on the programmed instruction. Some very valuable suggestions were made: a glossary of all the terminology employed should be prepared, certain sections of one or two lessons could be made more clear, etc. But it was generally conceded that CBI was very helpful; its degree of

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organization was singled out for praise, as was the fact that the material could be gone over, in private, as many times as the student wished.

Student complaints had to do with various subjects: frustration at dealing with a preprogrammed machine instead of a presumably more flexible human being. Occasionally the teletype would type one line on top of another. Students were somewhat put out at having to walk all the way over to the Institute for Mathematical Studies in the Social Sciences, particularly during the rains. While one assumes that the students read the material, think about it, decide how to answer, and then type the answer, apparently this is not always so. The cognitive processes can be short-circuited to the extent that the visual stimulus of the teletype printout is answered not by a thought, but merely by a digital response. In other words, the answer to the question "What is the locative singular ending of the noun XXXXX?" is not "the phoneme/grapheme, Y," but merely "right little finger to the lower row." The suggested solution was to include a quiz at the end of every lesson; this prospect will help maintain the students' full attention throughout the lesson. Last, a rather curious and somewhat disturbing circumstance arose with at least two of the students: rather than learn the material on the teletype, they would take a lesson and answer somewhat carelessly, without complete concentration. The primary object seemed to be merely to get a printout of the lesson material to be studied, not as CBI, but as a text at home. Note, these students performed as well as the others on the final examination.

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7. Results of the Final Examination

The results of the final examination (see Appendix V) were encouraging. Reliance on CBI freed me to take up a wide range of subjects that I normally would have little or no time for during the nonprogrammed course. On the final examination the students were tested on subjects that I had lectured on and for which there was supplementary reading, on subjects about which they had only read, on subjects about which I had lectured and for which there was additional CBI material, and last, on CBI material that was not reinforced by lecture material. The students emerged strongest with regard to the lecture/CBI combination; they were also very strong on the material that was presented as CBI alone. The fact that they were able to absorb rather involved linguistic arguments that had been presented on the computer alone was most encouraging. My overall view of their performance is that, all things being equal, they learned more and with greater ease than did last year's class, which depended on my lectures and the reading alone.

The grades awarded for the course were two A's, two A-'s, and one B.

8. Assessment

I was somewhat skeptical of the project when I began. I thought that by working diligently and by coping imaginatively with every problem, I might be able to design the course material in such a way that the students would not lose anything for having been made the subjects of an experiment.

The results exceeded these modest expectations. The rigorous reorganization of the material required for the design of CBI served to

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benefit student and instructor as well. But more importantly, student evaluations of the course material and the results of the final examination showed very clearly that the CBI approach to the material thus far programmed is pedagogically sound; it may even represent an improvement over last year's lecture format.

The limitations intrinsic to the subject matter combined with those of the system are such that I do not envision the programming of the entire course and the effective elimination of the instructor. But I think that this is just as well for a variety of reasons:

1. Class meetings with the instructor serve as an important forum for comments, questions, and complaints about the CBI.

2. The forced reliance of the system on precomposed answers allows the student no exercise of creativity; knowledge comes to be almost a conditioned reflex. It is only in the interchange of a discussion group that the material may be expanded upon, treated in an 'organic' manner.

3. The scope of the CBI material is inflexible; what is in the lesson is what is to be learned--no more, no less. Nonetheless, the basic, factual core of the course remains the same from year to year. It is this material that has been programmed already, or will be finished this summer. In addition to this, the exercises involving text analysis should not require change. The existence of this basic corpus and its availability to the student on an on-call basis will serve to drastically cut the amount of time required of the instructor of the course.

Finally, another bonus gained from the programming of Old Church Slavonic and part of the History of the Russian Literary Language is the establishment of a 'course library' that can be consulted by students.

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Experience has taught us that, regardless of mode of teaching, students quickly forget OCS and OR; extensive review is necessary before the Ph.D. general examinations in this area. CBI in OCS and OR will be available to these students largely at their convenience for review. This material by itself should be an effective preparation for the students in this area. We will soon have an opportunity to test this supposition, since four of our graduate students are preparing to take general examinations in the near future. All four have requested use of the CBI material in Slavic 211 and 212 for review.

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APPENDIX I

Sample portions of Lessons 755 and 758, pronoun and verb morphology, respectively. Note: The student types the answer, here provided, in the spaces set off by underline marks.

```
BEG     755
TE      THE PRONOUN
        THE SING
         WE HAVE ALREADY NOTED THE DIFFERENCE BETWEEN THE OCS
         AND ORUS NOM IST SING PRN.  OCS HAS
LR       _AZ%_
TE       THE ORUS FORM HAS
        A, INITIAL 'A'
         E, PROTHETIC JOD
SR       _E_
TE      THE ORUS IST SING PRN IS
SR       _IAZ%_
TE       NOTE,  IA  WAS ALSO COMMON.

         IN THE DAT-LOC OF THE 2ND PERS SING AND THE REFLEXIVE
        PRN, WHERE OCS HAD 'E', ORUS HAD 'O'.
         GIVE THE ORUS FORM OF OCS  TEБ%
LR      _TOБ%_
TE       GIVE THE ORUS DAT-LOC REFLEX PRN
LR      _COБ%_
TE       NOTE, THE OCS FORMS ALSO OCCURRED IN ORUS.

         IF OCS HAD 'E' FOR ORUS 'O' AS ABOVE AND IF THE OCS
         FORM OF THE DAT-LOC OF THE IST PERS SING PRN WAS  MЬHЪ,
        THEN WE CONCLUDE THAT THE ORUS FORM WAS
LR      _MЬHЪ_
TE       NOTE,  MЬHЪ  WAS ALSO COMMON.

        ORUS FORMS ARE ATTESTED IN WHICH THE FINAL  %  OF THE
        DAT-LOC OCCURRED ALSO IN THE ACC-GEN.  THUS  TEБ%,
         CEБ%  COULD BE
         A, DAT LOC INST
        E, DAT LOC ACC GEN
SR       _E_

TE      GIVEN THE ABSENSE OF NASALS IN ORUS, LIST THE
         FORMS OF OCS
LR       MA  _MA_
TE       HOWEVER, EVEN THOUGH  A  IS WRITTEN, THE ORUS V IS
         NOT NASAL.  IT IS A FRONTED
SR       _A_
TE       GIVE THE ORUS FORMS OF OCS
LR       CA  _CA_
LR       TA  _TA_
LR       MЬHOIA  _MЬHOIO_
LR       COБOIA  _COБOIO_
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```
TE      THE PARADIGM OF THE IST AND 2ND SING PRN IS -- FILL IN
        THE 2ND PERS

                IST PERS        2ND PERS

LE      NOM      IA3Ъ, IA       _TЪI_
LE      ACC      MEHE, MA       _TEБE_, _TA_
LE      GEN      MEHE           _TEБE_
LE      LOC      MЪHЪ           _TOБЪ_
LE      INST     MЪHOIO         _TOБOIO_
LE      DAT      MЪHЪ, MИ       _TOБЪ_, _TИ_
RST     .

TE      THE IST PLUR OCS HAS DATIVE
LR      _HAMЪ_
TE      2ND PERS
LR      _BAMЪ_
TE      ORUS HAS THESE, BUT  HЪI, BЪI   RE ALSO POSS.
        THUS ORUS  HЪI  CAN BE
        A, DAT
        E, DAT ACC
SR      _E_
TE      IF ORUS  BЪI  CAN BE DAT AND  CC, THEN ALL ITS POSSIBILITIES
        ARE
        A, DAT ACC
        E, NOM DAT ACC
SR      _E_
TE      THE REMAINING FORMS ARE THE SAME IN BOTH DIAL'S.

        THEREFORE, THE PARADIGM OF THE IST AND 2ND PERS PLUR
        PRN IS -- FILL IN THE 2ND PERS

                IST PERS        2ND PERS

LE      NOM      MЪI            _BЪI_
LE      ACC      HACЪ, HЪI      _BACЪ_, _BЪI_
LE      GEN      HACЪ           _BACЪ_
LE      LOC      HACЪ           _BACЪ_
LE      INST     HAMИ           _BAMИ_
LE      DAT      HAMЪ, HЪI      _BAMЪ_, _BЪI_

TE      THE IST AND 2ND DUAL IS -- FILL IN THE 2ND PERS

                IST PERS        2ND PERS

LE      NOM      BЪ             _BA_
LE      ACC      HA             _BA_
LE      G-L      HAIO           _BAIO_
LE      I-D      HAMA           _BAMA_
RST     .

THE LESSON CONTINUES
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RUS758

```
BEG     758
TE      THE VERB
        THE ORUS AND OCS VERBS ARE SIMILAR.  THEY
        HAVE THE SAME TENSES, PARTICIPLES, MOODS, ETC.  BUT
        AS ELSEWHERE, THERE IS SOME DIFFERENCE IN THE FORM
        THAT CERTAIN ENDINGS TAKE.  WE ALREADY KNOW THAT
        OCS  Я  CORRESPONDS TO ORUS
LR      _OY_
TE      ON THE PHONOLOGICAL LEVEL OCS  A  EQUALS ORUS
LR      _A_
TE      HOWEVER, IN THE NOUN AND ADJ, ON THE MORPHOLOGICAL LEVEL
        OCS  A  CAN GIVE ORUS
LR      _Ъ_
TE      IN THE VERB, HOWEVER,  OCS  A  ALWAYS GIVES ORUS  A.

        REMEMBER ALSO THE REFLEXES OF ORIGINAL C PLUS JOD.
        THUS WHERE OCS HAS  ВИЖДЯ,  ORUS HAS
LR      ВИ_ЖОУ_
TE      GIVE THE ORUS FORM OF OCS  ХОЖДЯ
LR      _ХОЖОУ_
LR      МОЩИ _МОЧИ_
TE      THE  Щ  IN OCS  ИЩЯТЪ  REPRESENTS
LR      _ЩТ_
TE      WHILE IN ORUS  ИЩОУТЬ  IT REPRESENTS
LR      _ЩЧ_
TE      IN ADDITION TO THESE CORRESPONDENCES,
        IN THE PRES TENSE
        WHERE OCS HAS  -ТЪ  IN THE 3RD PERS ORUS
        HAS  -ТЬ.   GIVE THE ORUS FORM OF OCS
LR      НЕСЕТЪ  _НЕСЕТЬ_
LR      ВИДИТЪ  _ВИДИТЬ_
LR      НЕСЯТЪ  _НЕСОУТЬ_
LR      ВИДАТЪ  _ВИДАТЬ_
RST     .

TE      THE ONLY OTHER ESSENTIAL DIFFERENCE IN THE PRES
        IS IN THE DUAL.  WHERE OCS HAS SEPARATE 2ND AND 3RD
        PERS. ORUS DOES NOT. E.G.. OCS HAS 2ND PERS
LR      ВА ВЕД_ЕТА_
LE      AND THIRD PERS  ОНЪ ВЕД_ЕТЕ_
TE      BUT ORUS HAS THE 2ND PERS FORM IN BOTH THE 2ND AND
        THIRD PERS.  THUS WE HAVE ORUS
LR      ВА ВЕД_ЕТА_
LR      ОНА ВЕД_ЕТА_

TE      THE REMAINING FORMS ARE THE SAME IN BOTH DIAL'S, THUS
        THE PRES TENSE  ВЕД- IS

        SING
LR      IA3Ъ ВЕД_ОУ_
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LR      TЪI  ВЕД_ЕШИ_
LR      ОНЪ  ВЕД_ЕТЬ_

TE      DUAL
LR      ВЪ  ВЕД_ЕВЪ_
LR      ВА  ВЕД_ЕТА_
LR      ОНА ВЕД_ЕТА_

TE      PLUR
LR      МЪI  ВЕД_ЕМЪ_
LR      ВЪI  ВЕД_ЕТЕ_
LR      ОНИ  ВЕД_ОУТЬ_

TE      NOTE, THE THIRD SING AND PLUR ALSO OCCURRED
        WITHOUT FINAL -Ть.  THUS, THEY, MASC, ARE
        LEADING  COULD BE AS ABOVE OR
LR      _ОНИ ВЕДОУ_
TE      HE LEADS  COULD BE AS ABOVE, OR
LR      _ОНЪ ВЕДЕ_
TE      GIVEN NO UNFORESEEN DIFFERENCES BETWEEN ORUS AND OCS
        OTHER TENSES,  ОНЪ ВЕДЕ  COULD BE
        A, PRES OR IMPERF
        E, PRES OR AORIST
SR      _E_
RST     .

TE      THE IST SING OF AN I-STEM, E.G.,  МОЛИТИ  IS
LR      _МОЛIО_
TE      THIRD PLUR IS
LR      _МОЛАТЬ_
TE      THUS WE HAVE

        SING
LR      IAЗЪ МОЛ_IO_
LR      ТЪI  МОЛ_ИШИ_
LR      ОНО  МОЛ_ИТЬ_

TE      DUAL
LR      ВЪ  МОЛ_ИВЪ_
LR      ВА  МОЛ_ИТА_
LR      ОНЪ МОЛ_ИТА_

TE      PLUR
LR      МЪI  МОЛ_ИМЪ_
LR      ВЪI  МОЛ_ИТЕ_
LR      ОНЪI МОЛ_АТЬ_

TE      WHAT DO YOU SUPPOSE THE THIRD SING OF ДАТИ IS IN ORUS?
TST     I
LR      _ДАСТЬ_
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```
BLK     .
TE      WE HAVE  -Tь  IN THE ATHEMATICS ALSO.
FIN     .
TE      THE REMAINING FORMS ARE THE SAME IN BOTH DIALS.
        CONJUGATE  ДАТИ  IN ORUS

        SING
LR      IA3ъ _ДАМЬ_
LR      Тъ I  _ДАСИ_
LR      ОНО  _ДАСТЬ_

IE      DUAL
LR      Въ  _ДАВЪ_
LR      ВА  _ДАСТА_
LR      ОНА _ДАСТА_

TE      PLUR
LR      Мъ I _ДАМЪ_
LR      Въ I _ДАСТЕ_
LR      ОНА _ДАДАТЬ_
RST     .
```

THE LESSON CONTINUES

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APPENDIX II

The content of the eleven lessons programmed is:

751. Orthography, the differences between the OCS and OR phonologies and the respective writing systems.

752. Pleophony, the concept of rising sonority and the difference between its effect on so-called 'tort' groups in OR and OCS where metathesis occurs.

753. Syllabic synharmonism, the causes of the various 'palatalizations' and their different effects in OR and OCS.

754. The noun, OR noun morphology as opposed to that of OCS.

755. The pronoun, OR pronoun morphology as opposed to that of OCS.

756. The adjective, OR adjectival and participial morphology as opposed to that of OCS.

757. The numeral, OR numeral morphology and syntax as opposed to that of OCS.

758. The verb, OR verb morphology as opposed to that of OCS.

759. The fall of the 'jers', the loss of the reduced vowels and its effects upon OR phonology and morphology.

760. The loss of the dual, the effects of the loss of the singular/dual/plural grammatical distinction upon OR morphology and numeral syntax.

761. Changes in the declension system, the change from a declension system based on a variety of declension types to a system based on grammatical gender; the rise of the category of animation.

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APPENDIX III

Sample portions of Lessons 759 and 760, the fall of the 'jers' and the loss of the dual, respectively. Note the considerable increase in the amount of narration and multiple-choice, true-false, etc., questions as opposed to the material in Lessons 755 and 758 (Appendix I).

RUS759

```
BEG     759
TE       IN THE EARLIEST OCS TEXTS THE 'JERS' OR REDUCED VOWELS
          ъ, ь  WERE
         A, CLEARLY DISTINGUISHED
        E, LOST IN CERTAIN POSITIONS
SR      _E_
TE       WHEREAS, IN EARLIEST ORUS  ъ  AND  ь  WERE RETAINED
        EVEN AT WORD-END, E.G., THE M-N INST SING AND
        DAT PLUR ENDED IN A
        A, VOWEL
         E, CONSONANT
SR       _A_
TE      EVENTUALLY THE JERS FELL IN ORUS AS THEY HAD IN OCS.
         THIS HAPPENED IN DIFFERENT ORUS DIAL'S AT DIFFERENT
         TIMES. IT SEEMS TO HAVE STARTED IN THE SOUTH IN
         THE XITH CENT AND TO HAVE SPREAD THROUGHOUT ORUS
         BY THE XIIITH CENT.

          T  OR  Φ , NOT ALL JERS 'FELL' OR CEASED TO BE PRN-CD.
SR       _T_
TE      SOME BECAME FULL V'S.
         IF  E  IS TO  O  AS  ь  IS TO  ъ , AND IF STRONG  ь
         GAVE  E , THEN STRONG  ъ  GAVE
SR      _O_
TE       RULE FOR VOCALIZATION VERSUS LOSS OF THE JERS.
            GIVEN A SUCCESSION OF SYLLABLES CONTAINING JERS,
            THEN, COUNTING FROM THE RIGHT, EVERY ODD-NUMBERED JER
           IS WEAK, EVERY EVEN JER IS STRONG. ANY JER IN A SYLL
            PRECEDING A SYLL WITH A FULL V IS WEAK.  STRESSED JERS
            ARE STRONG.
         TYPE  X  AFTER EACH WEAK AND  C  AFTER EACH STRONG JER.
SR       бь_X_Рь_C_Вь_X_НО
LE       THIS GIVES  _БРЕВНО_.
SR       Съ_X_НА
LE      THIS GIVES  _СНА_.
TE       WEAK JERS WERE NOT PRN'D, THUS THEY WERE NORMALLY
         NOT WRITTEN.  HOWEVER, WEAK  ъ  WAS RETAINED ORTHOGRAPHICALLY
         AT WORD-END.
LE      THUS  СъНъ  GIVES  _СОНъ_.
LE        Лъбъ  GIVES  _ЛОбъ_
LE        ЛьВъ  GIVES  _ЛЕВъ_,  ETC.
TE       WEAK  ь  WAS WRITTEN IN CERTAIN POSITIONS, ALWAYS AT WORD-END.
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LE      THUS, ДЬНЬ GIVES _ДЕНЬ_
LE      КЪНАЗЬ GIVES _КНАЗЬ_
TE      WEAK Ь WAS RETAINED BETWEEN TWO С'S WHERE THE LEFTMOST
        OF THE С'S REMAINED SHARPED.
LE      СОУДЬБА GIVES _СОУДЬБА_
LE      BUT ДЬНЕ GIVES _ДНЕ_.
TE      Ь WAS RETAINED, ALTHOUGH IT WAS WEAK, WHERE IT OCCURRED
        BEFORE A V. THUS PRE-FALL ,СВИНЬІА BECAME

LR      _СВИНЬІА_
TE      NOTE, THE RETENTION OF Ь IS PARTICUARLY
        COMMON AFTER Л.
LE      THUS КОЛОКОЛЬНИКЪ GIVES _КОЛОКОЛЬНИКЪ_,
TE      BOTH JERS ARE WEAK, I. Е., NOT PRN'CD, BUT WERE
        WRITTEN, NONETHELESS.
RST     .
TE      THERE ARE EXCEPTIONS TO THE VOCALIZATION RULE. SOME
        INVOLVE ANALOGY WITH OTHER FORMS. E.G., ДЪСКА GIVES
LR      _ДСКА_
TE      AND EVENTUALLY ТСКА, ЦКА WITH THE DEVOICING OF 'D'
        BEFORE VOICELESS 'S'.
        HOWEVER, STRESSED JERS ARE STRONG. THUS, IN THE ACC SING
        OF ДЪСКА THE STRESS MOVES TO THE IST SYLL, CF., ВОДА',
        ВО'ДУ.
TE      THUS, THE JER IN ДЪСКОУ WAS
        A, STRONG
        Е, WEAK
SR      _А_
LE      ДЪСКОУ DEVELOPS TO _ДОСКОУ_.
TE      WHEREAS, ASSUMING NO DEVOICING OF THE 'D', THE DAT SING
LE      DEVELOPED TO _ДСКЪ_.
TE      WITH EVENTUAL DEVOICING IT DEVELOPED TO
LR      _ЦКЪ_
TE      WITH DEVOICING THE LOC PLUR BECAME
LR      _ЦКАХЪ_
TE      ON THE OTHER HAND, THE PRE-FALL GEN PLUR IS
LR      _ДЪСКЪ_
LE      WHICH GIVES POST-FALL _ДОСКЪ_.
TE      A PARADIGM WITH CHANGING STEMS WOULD NOT DO, SO
        THE STEM OF THE ACC SING WAS GENERALIZED FOR THE WHOLE
        PARADIGM.

        LIKEWISE, THE PLACE NAME СМОЛЬНЬСКЪ SHOULD HAVE GIVEN
LR      _СМОЛНЕСКЪ_
TE      BUT IT TOOK ITS STEM FROM THE OBLIQUE CASE-FORMS, I.E.,
        THE DAT SING WAS СМОЛЬНЬСКОУ WHICH GAVE
LR      _СМОЛЕНСКОУ_
TE      WHICH SERVED AS THE MODEL FOR THE EVENTUAL NOM SING, I.E.,
LR      _СМОЛЕНСКЪ_
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RST     .
TE      GIVEN THAT MRUS  ДЕРЖАТЬ  IS FROM ORUS  ДЬРЖАТИ  AND
          БЛОХА  FROM  БЛЪХА , WE CAN CONCLUDE THAT JERS
         IN SO-CALLED 'ТЪРТ' GROUPS WERE
        A, ALWAYS STRONG
         Б, COULD BE STRONG OR WEAK
SR      _А_
LE      THUS, WHILE  ТЪРГЪ  GIVES  _ТОРГЪ_,
TE       THE GEN SING DEVELOPS PROPERLY TO


LR       _ТОРГА_
TE       AS OPPOSED TO THE GEN SING OF  СЪНЪ  WHICH GIVES
LR       _СНА_
TE       THUS, THE JER IN 'JER PLUS LIQUID' OR VICE-VERSA IS STRONG
         AS OPPOSED TO  СЪНЪ, СЪНА  WHERE THE JER IS WEAK IN THE GEN.
         GIVE THE POST-FALL FORM OF THE FOLLOWING
LR       ТЪРГОВАТИ _ТОРГОВАТИ_
LR      ПЬРВЪ  _ПЕРВЪ_
LR      ВЬРХЪ  _ВЕРХЪ_
LR       СЛЬЗА  _СЛЕЗА_
LR       ВЪЛКЪ  _ВОЛКЪ_
LR       ВЪЛКА  _ВОЛКА_

RST     .
TE      THE FALL OF JERS HAD SEVERAL MAJOR, LONG-REACHING
        EFFECTS ON THE HISTORY OF THE LANGUAGE.
        PRE-FALL  ЛЪСЪ  CONSISTS OF HOW MANY SYLLABLES?
SR      _2_
TE       ITS POST-FALL FORM HAS HOW MANY SYLLABLES?
SR      _I_
TE       THAT SYLLABLE IS OPEN OR CLOSED, О OR Ч?
SR       _Ч_
TE       ASSUMING THAT THE FALL DID NOT ALTER THE PITCH
         OF THE С'S, THEN  Л  HAS HIGH OR LOW PITCH,
         Ч OR Л?
SR      _Ч_
TE        С  HAS HIGH OR LOW PITCH, Ч OR Л?
SR       _Л_
TE       THUS, POST-FALL  ЛЬСЪ
         A, CONFORMS TO
         Б, VIOLATES
         SYLLABIC SYNHARMONISM
SR       _Б_
TE       POST-FALL  ЛЕСЪ  CONSISTS OF ONE
         A, OPEN
         Б, CLOSED SYLLABLE
SR      _Б_
TE       THE LAW OF OPEN SYLLABLES AND SYLLABIC SYNHARMONISM CEASE
         TO BE ACTIVE WITH THE FALL OF THE JERS IN ORUS, I.E.,
         BY THE END OF THE
        A, XIII C.
         Б, XIV C.
SR       _А_
RST      .

TE       THUS, XIV-CENT ORUS PHONOLOGY IS RADICALLY DIFFERENT FROM
         THAT OF THE XTH CENT AND STRIKINGLY SIMILAR TO THAT OF
         MRUS, SINCE AMONG OTHER THINGS, PHONETIC SHARPENING
         BECAME PHONEMIC.
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BEG     765
TE       IN XITH CENT ORUS AND OCS THE DUAL WAS ALREADY STARTING TO
         WEAKEN, SPORADIC MISTAKES BEGIN TO APPEAR IN THE PRONOUN.
         OTHER DUAL FORMS WERE WRITTEN PROPERLY AT THAT TIME,
         E.G.,  ВѢI НЕБЕСЬНАIА ЧЛОВѢКА IЕСТА.
         WHERE THERE IS A MISTAKE IN THE WORD
LR       _ВѢI_
TE       WHICH SHOULD BE
LR       _ВА_
TE       AS THE USAGE OF THE DUAL BECAME MORE RESTRICTED
         ITS FUNCTION WAS PREEMPTED BY THE
         A, SING
         E, PLUR
SR       _Е_
TE      WHILE THE DUAL IS ACTIVE, THE MAJOR DISTINCTIONS WITHIN
         THE CATEGORY OF NUMBER ARE THREE-FOLD 'ONE', 'TWO',
         'MORE THAN TWO', WHICH, WITH THE LOSS OF THE DUAL, WILL
         BECOME
         A, 'ONE', 'MORE THAN ONE'
        E, 'ONE', 'ALL'
SR       _А_
TE       I.E., SING-PLUR.
         CERTAIN NOUNS, BY VIRTUE OF THEIR MEANING, TEND TO OCCUR
         MORE OFTEN IN ONE NUMBER THAN OTHERS.
         OF THE FOLLOWING FORMS, WHICH IS MOST LIKELY TO OCCUR
         IN DISCOURSE?
        A, SING  РОГЪ          'HORN', OF AN ANIMAL
         E, DUAL  РОГА
         О, PLUR  РОЗИ
SR       _Е_
TE      BECAUSE THE HORNS OF AN ANIMAL TEND TO COME IN PAIRS.
        SAME QUESTION
        A,  НЕБО               'HEAVEN'
        E,  НЕБЕСЬ
        О,  НЕБЕСА
SR      _А_
TE       SAME QUESTION
         A,  ОВЬЦА             'SHEEP'
         E,  ОВЬЦИ
         О,  ОВЬЦЪ
SR       _О_
TE      IN GENERAL THE DUAL WILL HAVE OCCURRED MOST COMMONLY
         WITH PAIRED OBJECTS.  AS IT WEAKENS, WE CAN EXPECT
         IT TO BE USED LESS AND LESS IN GENERAL AND LESS
         AND LESS CORRECTLY WITH
        A,  НЕБО, ОВЬЦ
         E,  РОГЪ
SR       _А_
TE       THUS, THE FORM OF 'HORN', 'EYE', 'SHOULDER',
         ETC., MOST FREQUENTLY ASSOCIATED WITH THE CONCEPT 'MORE THAN
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          ONE' BECOMES
          A, THE DUAL
          E, THE PLUR
SR        _A_
RST       .
TE        AS THE DUAL IS TAKEN OVER SEMANTICALLY BY THE PLUR,
          THE GRAMMATICAL DISTINCTION BETWEEN DUAL AND PLUR BECOMES
          BLURRED, SINCE THEY BOTH DESIGNATE 'MORE THAN ONE', AND
          WITH PAIRED OBJECTS BECOMES OBLITERATED.  THIS CAN LEAD TO
          A, REINSTITUTION OF THE DUAL NUMBER
          E, USE OF THE DUAL FOR THE PLUR WITH PAIRED OBJECTS
SR        _E_
YE        JUDGING FROM MRUS ГЛАЗА', РОГА',  ET AL., THE DUAL ENDING
          THAT SPREAD IS THE MASC
          A, NOM-ACC
          E, GEN-LOC
          O, DAT-INST
SR        _A_
TE        NOTE, THAT THIS IS NOT THE CASE IN ALL SLAVIC LNGS, IN
          SERBO-CROATIAN THE DAT-INST ENDING SPREAD.
RST       .
TE        THE SPREAD OF THE MASC DUAL N-A ENDING WAS REINFORCED BY THE
          FOLLOWING

          IN THE HARD FEM'S THE GEN SING WAS IN
LR        -_ЪI_
TE        THE NOM PLUR WAS
LR        -_ЪI_
TE        HOWEVER, THERE WAS A DIFFERENCE IN THESE ENDINGS WITH
          WORDS LIKE  ВОДА, ЖЕНА.
          A, STRESS
          E, PHONETIC SHARPENING
SR        _A_
TE        IN THE SOFT FEM'S THE GEN SING WAS
LR        -_Ъ_
TE        THE NOM PLUR WAS
LR        -_Ъ_
TE        HOWEVER, WITH WORDS SUCH AS  ЗЕМЛЯ  THERE WAS, AGAIN,
          A DIFFERENCE IN STRESS.
          IN THE 2-FOLD HARD NEUT'S THE GEN SING WAS IN
LR        -_A_
TE        THE NOM PLUR WAS
LR        -_A_
TE        THE SOFT NEUT'S HAD GEN SING, NOM PLUR
SR        -_IA_
TE        BUT IN WORDS SUCH AS  СЕЛО, ПОЛЕ,  ET AL. THERE WAS
          A DIFFERENCE IN STRESS,  СЁЛА', СЕ'ЛА, ПО'ЛЯ, ПОЛЯ'.
          T OR F, THE SAME IS TRUE OF HARD MASC'S
SR        _Ф_
TE        THIS GEN SING AND NOM PLUR ARE THE SAME EXCEPT FOR STRESS
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WITH CERTAIN FEM AND NEUT NOUNS, BUT NOT FOR HARD MASC'S
BECAUSE HARD MASC GEN SING IS IN

LR -_A_
TE BUT THE NOM PLUR IS IN
LR -_И_
TE HOWEVER, THE NOM-ACC DUAL ENDING OF HARD MASC'S IS A
STRESSED
LR -_A_
TE THUS, IF THAT SAME NOUN HAD AN UNSTRESSED GEN SING
ENDING, THE SPREAD OF THE N-A DUAL WOULD CAUSE IT TO CORRESPOND
TO THE ENDING-STRESS SHIFT OF THE OTHER DECL-TYPES, I.E.,
GEN SING AND NOM PLUR DIFFER ONLY IN
A, STRESS
E, HARD VERSUS SHARPED FINAL C
SR _A_
TE THUS, OLD DUAL N-A STRESSED A SPREAD TO NON-PAIRED OBJECTS,
LIKE ГОРОДЪ, BUT ONLY WHERE THE GEN SING IS UNSTRESSED
NOTE, EXCEPTIONS ARE RARE, E.G.
A, РУКАВА
E, ГЛАЗА
SR _A_

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Lectures

APPENDIX IV

These four questions pertain to your own interest and participation in the course:	Answer (Make no response if you feel the question is inappropriate)
1. Did you enjoy this course? (1) Much more than average (2) More than average (3) Average (4) Less than average	( )
2. Was the course presented at the appropriate intellectual level for you? (1) Too difficult (2) Appropriate (3) Too easy	(2)
3. How hard did you work in this course? (1) Extremely hard (2) Hard (3) Average (4) Not very hard	(1)
4. Do you feel that the material presented was worth learning? (1) Definitely (2) Yes (3) Maybe (4) No	(1)
Rate the lectures on the following:	
5. Were clear and well organized: (1) Outstanding (2) Good (3) Fair (4) Poor	(3)
6. Were intellectually stimulating: (1) Outstanding (2) Good (3) Fair (4) Poor	(2)
7. In comparison with all other lecturers you have had at Stanford, how would you rate this lecturer? (1) Outstanding (2) Good (3) Fair (4) Poor	(2)
Rate the course assignments: (Papers, problem-sets, readings)	
8. Were they valuable in their own right? (1) Outstanding (2) Good (3) Fair (4) Poor	(1)
9. Were they well integrated with the lectures? (1) Outstanding (2) Good (3) Fair (4) Poor	(1)

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Instructor's Name

Lectures

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These four questions pertain to your own interest and participation in the course:

Answer (Make no response if you feel the question is inappropriate)

1. Did you enjoy this course?
   (1) Much more than average (2) More than average (3) Average (4) Less than average — (3)

2. Was the course presented at the appropriate intellectual level for you?
   (1) Too difficult (2) Appropriate (3) Too easy — (3)

3. How hard did you work in this course?
   (1) Extremely hard (2) Hard (3) Average (4) Not very hard — (1)

4. Do you feel that the material presented was worth learning?
   (1) Definitely (2) Yes (3) Maybe (4) No — (2)

Rate the lectures on the following:

5. Were clear and well organized:
   (1) Outstanding (2) Good (3) Fair (4) Poor — (2)

6. Were intellectually stimulating:
   (1) Outstanding (2) Good (3) Fair (4) Poor — (2)

7. In comparison with all other lecturers you have had at Stanford, how would you rate this lecturer?
   (1) Outstanding (2) Good (3) Fair (4) Poor — (2)

Rate the course assignments: (Papers, problem-sets, readings)

8. Were they valuable in their own right?
   (1) Outstanding (2) Good (3) Fair (4) Poor — (3)

9. Were they well integrated with the lectures?
   (1) Outstanding (2) Good (3) Fair (4) Poor — (2)

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Prof. Schupbach
Instructor's Name

Lectures

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These four questions pertain to your own interest and participation in the course:

Answer (Make no response if you feel the question is inappropriate)

1. Did you enjoy this course?
   (1) Much more than average (2) More than average (3) Average (4) Less than average — (5)

2. Was the course presented at the appropriate intellectual level for you?
   (1) Too difficult (2) Appropriate (3) Too easy — (1) at the beginning

3. How hard did you work in this course?
   (1) Extremely hard (2) Hard (3) Average (4) Not very hard — (1)

4. Do you feel that the material presented was worth learning?
   (1) Definitely (2) Yes (3) Maybe (4) No — (1)

Rate the lectures on the following:

5. Were clear and well organized:
   (1) Outstanding (2) Good (3) Fair (4) Poor — (3)

6. Were intellectually stimulating:
   (1) Outstanding (2) Good (3) Fair (4) Poor — (2)

7. In comparison with all other lecturers you have had at Stanford, how would you rate this lecturer?
   (1) Outstanding (2) Good (3) Fair (4) Poor — (2)

Rate the course assignments: (Papers, problem-sets, readings)

8. Were they valuable in their own right?
   (1) Outstanding (2) Good (3) Fair (4) Poor — (2)

9. Were they well integrated with the lectures?
   (1) Outstanding (2) Good (3) Fair (4) Poor — ( ) lectures yes, discussion labs

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Instructor's Name

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Lectures

These four questions pertain to your own interest and participation in the course:

Answer (Make no response if you feel the question is inappropriate)

1. Did you enjoy this course?
   (1) Much more than average (2) More than average (3) Average (4) Less than average — (3)

2. Was the course presented at the appropriate intellectual level for you?
   (1) Too difficult (2) Appropriate (3) Too easy — (2)

3. How hard did you work in this course?
   (1) Extremely hard (2) Hard (3) Average (4) Not very hard — (2)

4. Do you feel that the material presented was worth learning?
   (1) Definitely (2) Yes (3) Maybe (4) No — (1)

Rate the lectures on the following:

5. Were clear and well organized:
   (1) Outstanding (2) Good (3) Fair (4) Poor — (2)

6. Were intellectually stimulating:
   (1) Outstanding (2) Good (3) Fair (4) Poor — (1)

7. In comparison with all other lecturers you have had at Stanford, how would you rate this lecturer?
   (1) Outstanding (2) Good (3) Fair (4) Poor — (2)

Rate the course assignments: (Papers, problem-sets, readings)

8. Were they valuable in their own right?
   (1) Outstanding (2) Good (3) Fair (4) Poor — (2)

9. Were they well integrated with the lectures?
   (1) Outstanding (2) Good (3) Fair (4) Poor — (2)

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Course Department and Number

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Instructor's Name

Lectures

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These four questions pertain to your own interest and participation in the course:	Answer (Make no response if you feel the question is inappropriate)
1. Did you enjoy this course? (1) Much more than average (2) More than average (3) Average (4) Less than average	(3)
2. Was the course presented at the appropriate intellectual level for you? (1) Too difficult (2) Appropriate (3) Too easy	(2)
3. How hard did you work in this course? (1) Extremely hard (2) Hard (3) Average (4) Not very hard	(2)
4. Do you feel that the material presented was worth learning? (1) Definitely (2) Yes (3) Maybe (4) No	(1)
Rate the lectures on the following:	
5. Were clear and well organized: (1) Outstanding (2) Good (3) Fair (4) Poor	(3)
6. Were intellectually stimulating: (1) Outstanding (2) Good (3) Fair (4) Poor	(2)
7. In comparison with all other lecturers you have had at Stanford, how would you rate this lecturer? (1) Outstanding (2) Good (3) Fair (4) Poor	(2)
Rate the course assignments: (Papers, problem-sets, readings)	
8. Were they valuable in their own right? (1) Outstanding (2) Good (3) Fair (4) Poor	(1)
9. Were they well integrated with the lectures? (1) Outstanding (2) Good (3) Fair (4) Poor	(3)

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APPENDIX V

Slavic 212

Final Examination

I. 1/2 hour:
Briefly describe Henning Anderson's theory of the acquisition of language by one generation from another.

II. (choice of one) Material from Levin, 1/2 hour:

1. Sketch the relationship of the "деловой" and/or "канцелярский язык" to Church Slavonic during the Muscovite period. Give the historical reasons for the nature of their interaction.

2. What arguments does Levin bring forth against the notion that the Russian literary language is historically, natively Russian?

3. Discuss the types and degrees of assimilation of the various types of Old Chruch Slavonisms by the Russians in the Kievan period. Give examples.

III. Answer two of the following, 1/2 hour <u>each</u>:

1. Discuss the nature of the interaction of the o-, jo- and i-stems. What major phonological and morphological events and/or processes played a role in their interaction?

2. What is the relationship of metathesis and pleophony to the principle of "rising sonority"? Give examples.

3. What caused the palatalization of consonants, and how did it become phonemic in East Slavic?

4. Sketch the <u>major</u> phonological and morphological differences between OCS and Old Russian.

5. Indicate those forms in the following passage which are historically (in form, if not fact) Old Church Slavonisms. Comment on the mixture of native East Slavic forms with the latter. Identify the passage according to epoch, genre, and style.

Я помню море пред грозою:
Как я завидовал волнам,
Бегущим бурной чередою
С любовью лечь к ее ногам!
Как я желал тогда с волнами
Коснуться милых ног устами!
Нет, никогда средь пылких дней
Кипящей младости моей
Я не желал с таким мученьем
Лобзать уста младых Армид,
Иль розы пламенных ланит,
Иль перси, полные томленьем;
Нет, никогда порыв страстей
Так не терзал души моей!

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IV. (One hour) Translate the following passage. Identify it as to period and genre. Comment on the underlined forms.

В си же времена бысть знаменье на западѣ, звѣзда превеликa, лучѣ имуще аки кровавы, въсходящи с вечера по заходѣ солнечнѣмь, и пребысть за 7 дний. Се же проявление не на добро, посемь бо бышa усобицѣ многы и нашествие поганыхъ на Русьскую землю, си бо звѣзда бѣ аки кровава, проявляющи крови пролитье. В си же времена бысть дѣтищь вверьженъ в Сѣтомль* сего же дѣтища выволокоша рыболове въ неводѣ, егоже покоровахомъ [1] до вечера, и паки ввергоша и в воду; бѣшеть бо сиць: на лицѣ ему срамнии удове [2], иного нелзѣ казати срама ради.

* a body of water

1 to watch

2 members, characters

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(Continued from inside front cover)

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